

**Working Group:**

- Andrea Wooles (IST Manager)
- Dr. Susan Labrecque (Team Doctor – Para Cycling)
- Dr. Janet McKeown (Medical Officer – CSC-Pacific)
- Dr. Bruce Davidson (Team Doctor – Cycling)
- Dana Lis (Sport Dietitian – CSC-Pacific)
- Susan Boegman (Sport Dietitian – CSC-Pacific)
- Dr. Ben Sporer (Physiologist – CSC-Pacific)

**Background**

The basis of good performance in any sport is healthy eating – getting the right amount of energy and nutrients from a variety of healthy foods is the first and most important step.

However, we acknowledge that in cycling, even with good daily eating habits, it can be hard for an athlete to meet all of their nutritional needs with food alone. Also, there is a constant stream of marketing information about nutritional supplements, and it can be hard for athletes to know what to believe. There is always the risk of supplements being contaminated with substances that can cause them to fail an anti-doping test, but a sound supplement strategy can help them to make balanced decisions about which, if any, supplements they should take.

The role of this strategy is to provide guidelines, based on the most recent evidence, about which supplements can safely, ethically, and legally support health and performance. It is also intended to help our athletes avoid accidental positives through taking high-risk supplements. **It does not reproduce the WADA list, and so any rider considering taking a supplement should check with a Sports Dietician or Sports Medicine Doctor before taking anything.** Andrea Wooles, IST Manager for the CCA, can help you find the right person to help you.

There are two groups of products to consider:

1. Nutritional Supplements. These will only aid performance if there is a deficiency in the diet.
2. Nutritional Ergogenic Aids. These may improve performance if taken with appropriate dosages, irrespective of the athlete's nutritional status.

The guide is based on the Australian Institute for Sport's Supplement Group Classification ([www.ais.org.au/nutrition/supp.htm](http://www.ais.org.au/nutrition/supp.htm)), and the Great Britain Cycling Team's Nutritional Supplement Strategy.

This document will be updated regularly, as new products come onto the market or as new research emerges.

If you require further information or wish to discuss any issue raised please contact:  
Andrea Wooles ([andrea.wooles@canadian-cycling.com](mailto:andrea.wooles@canadian-cycling.com))



The guide is divided into three categories:

- GROUP A** - LIKELY/POSSIBLE SUPPORT FOR HEALTH OR PERFORMANCE
- GROUP B** - NOT ENOUGH EVIDENCE OF BENEFIT, OR EVIDENCE OF NO BENEFIT
- GROUP C** - PRODUCTS TO BE AVOIDED

### GROUP A: Likely/Possible Support for Health or Performance

Some supplements from within this Group are **recommended to be taken daily by all athletes**, to support health and performance:

- **Vitamin D** (recommended dosage 1000 IU per day, year-round)

#### Other Group A supplements:

These supplements are recommended only for some athletes in specific situations and can cause problems if used incorrectly. It is strongly recommended that any athlete considering the use of a supplement meet with a Sport Dietician.

- Caffeine \*
- Calcium
- Carbohydrate (glucose polymer) drink
- Cold-FX (sourced through Canadian Sport Centres, during cold season)
- Creatine\* (when using a tested 'clean' product only)
- Energy bars
- Ferrous sulphate or gluconate\*\*
- Fish Oil (1-3g per day)
- "Greens" products
- Glucosamine Sulphate (maximum dose 1,500mg per day)
- Liquid Meal Replacement
- Whey protein
- Melatonin\*\*\*
- Multivitamin and minerals (at doses no greater than 100%RDA)
- Probiotics
- Recovery drinks
- Sodium bicarbonate\*
- Sodium citrate \*\*
- Sport drinks
- Vitamin C (maximum 250mg per day)
- Vitamin E (maximum 400 IU per day) (only when used short-term for recovery)

\*/\*\*/\*\*\*These supplements are recommended only for some athletes in specific situations and can cause problems if used incorrectly.

\* = only after discussion with coach

\*\* = only on the advice of Doctor/Dietician for specific dosages and protocols

\*\*\* = only after discussion with Doctor or Sleep Specialist

**GROUP B: NOT ENOUGH EVIDENCE OF BENEFIT, OR EVIDENCE OF NO BENEFIT**

- B-alanine
- Beetroot juice
- Bee pollen
- Branched chain amino acids (and other free-form amino acids)
- Carnitine
- Cherry Juice (concentrate of Montmorency tart cherries)
- Chromium picolinate
- Coenzyme Q10
- Colostrum
- Cordyceps
- Cytochrome C
- Garlic
- Ginkgo biloba
- HMB (contamination with steroids caused an accidental positive last year)
- Inosine
- Nitric oxide supplements
- Oxygen boosters
- Pyruvate
- Rhodiola rosea
- Ribose
- Vitamin B12 injections
- ZMA

**GROUP C - PRODUCTS TO BE AVOIDED**

Supplements containing any of the following are very high risk for producing a positive doping control test. THIS IS A QUICK REFERENCE LIST OF HIGH-RISK PRODUCTS, ALWAYS CHECK THE WADA LIST AS WELL (or ask for help):

- Androstenedione
- Ginseng (except the purified extract used in batch-tested COLD-FX, which is Group A)
- DHEA
- Ephedra
- Geranamine
- 19-norandrostenedione
- 19-norandrostenediol
- Strychnine
- Tribulus terrestris and other herbal testosterone supplements

**\*\* NOTE: Products that provide a "money guarantee" that they are clean are not a good choice - any positive doping test that results will still be valid, and you may be banned. Money from the manufacturer won't help. \*\***



### How to source a tested 'clean' product:

A number of websites provide information and access to products that have undergone testing and therefore offer some confidence that the products are 'clean'. Only the NSF products offer a guarantee that there is "zero risk" of contamination at any stage of processing and packaging, so use NSF-certified products whenever possible:

- NSF – Certified for Sport [www.nsf.org](http://www.nsf.org) (Product List <http://tinyurl.com/lys9xe>)
- InterActive and INFINIT Custom Fuel Program through CSC-Pacific [www.fuelingcanada.com](http://www.fuelingcanada.com)
- Cold-FX – obtain batch tested product through your Canadian Sport Centre
- HFL – Sport Testing Program [www.informed-choice.org](http://www.informed-choice.org)
- Koelner – [www.koelnerliste.com](http://www.koelnerliste.com)

More information about why 'clean' products are important is available in a Supplement FAQ brochure from CCES ([www.cces.ca/pdfs/CCES-PUB-SupplementFAQ-E.pdf](http://www.cces.ca/pdfs/CCES-PUB-SupplementFAQ-E.pdf) )